

What is claimed is:

1. A stencil printing machine comprising:

a printing drum having an ink-permeable peripheral wall in a cylindrical shape and made rotatable around an axis line of the printing drum per se;

a squeegee roller for supplying ink from an inner peripheral face of the peripheral wall;

a press roller provided at outside of the printing drum for bringing a print sheet into press contact with a stencil sheet wound around an outer peripheral face of the peripheral wall between the squeegee roller and the press roller; and

exfoliation suction means for sucking the print sheet so as to exfoliate the print sheet from the printing drum;

the exfoliation suction means comprising:

a case having a guide plate at an upper face thereof and an exfoliation suction port at one end portion of the guide plate, the exfoliation suction port being arranged to be proximate to the press roller on a lower side of a reference line, the reference line being orthogonal to a center line of the squeegee roller intersecting with the axis line of the printing drum and passing through a position of bringing the press roller and the side of the printing drum into press contact with each other; and

a suction force generating portion for generating suction force to suck the print sheet toward the exfoliation suction port so as to exfoliate the print sheet from the printing drum, the suction force generating portion being provided at the case.

2. The stencil printing machine according to Claim

1:

wherein the suction force generating portion is provided to be proximate to a side of the exfoliation suction port.

3. The stencil printing machine according to Claim

5 1:

wherein the exfoliation suction port is provided at an upper end edge of the case constituting the one end portion side of the guide plate, and the exfoliation suction means further comprises a transfer section for transferring the print sheet, the transfer section having:

one pulley disposed at a vicinity of the exfoliation suction port in the case and axially supported by one end portion side of the guide plate;

the other pulley axially supported by other end portion side of the guide plate;

a support shaft provided at an opening portion of the exfoliation suction port; and

a transfer belt formed in an endless shape and hung around the pulleys and the support shaft so as to enter from the exfoliation suction port into the case;

the transfer section for driving an upper side portion of the transfer belt along an upper face of the guide plate.

4. The stencil printing machine according to Claim

1:

wherein the exfoliation suction means further comprises:

a transfer section for hanging a transfer belt formed in an endless shape around a pair of pulleys axially supported by

one end portion side and other end portion side of the guide plate so as to drive an upper side portion of the transfer belt along an upper face of the guide plate; and

5 a guide rib for supporting the print sheet exfoliated from the side of the printing drum at the exfoliation suction port without bending the print sheet so as to guide the print sheet toward the transfer belt.

5. The stencil printing machine according to Claim 1:

10 wherein a plurality of the printing drums are provided via the exfoliation suction means.

6. A stencil printing machine comprising:

15 a printing drum having an ink-permeable peripheral wall in a cylindrical shape and made rotatable around an axis line of the printing drum per se;

20 a squeegee roller for supplying ink from an inner peripheral face of the peripheral wall;

a press roller provided at outside of the printing drum for bringing a print sheet into press contact with a stencil sheet wound around an outer peripheral face of the peripheral wall between the squeegee roller and the press roller;

suction transfer means for sucking the print sheet so as to exfoliate the print sheet from the printing drum to thereby transfer the print sheet;

25 the suction transfer means comprising:

a case having a guide plate at an upper face thereof and an exfoliation suction port provided at one end portion of the

guide plate, the exfoliation suction port being arranged to be proximate to the press roller on a lower side of a reference line, the reference line being orthogonal to a center line of the squeegee roller intersecting with the axis line of the printing drum and passing through a position of bringing the press roller and a side of the printing drum into press contact with each other;

a suction force generating portion for generating suction force, the suction force generating portion being provided at the case; and

a transfer section for transferring the print sheet, the transfer section having:

one pulley disposed at a vicinity of the exfoliation suction port and axially supported by one end portion side of the guide plate;

the other pulley axially supported by other end portion side of the guide plate; and

an endless shaped transfer belt with a vent hole formed therein hung around the pulleys so as to enter from the exfoliation suction port into the case;

the transfer section driving an upper side portion of the transfer belt along an upper face of the guide plate;

wherein the guide plate has a transfer suction port overlapping the vent hole of the transfer belt, and the suction force generating portion generates suction force for sucking the print sheet toward the exfoliation suction port so as to exfoliate the print sheet from the printing drum and for sucking the

exfoliated print sheet toward the vent hole and the transfer suction port overlapped each other so as to adsorb the exfoliated print sheet onto the transfer belt.

7. The stencil printing machine according to Claim

5 6:

wherein the suction force generating portion is provided to be proximate to a side of the exfoliation suction port.

8. The stencil printing machine according to Claim

6:

wherein the exfoliation suction port is provided at an upper end edge of the case constituting the one end portion side of the guide plate, the one pulley is disposed in the case, the transfer section has a support shaft provided at an opening portion of the exfoliation suction port, and the transfer belt is hung around the pulleys and the support shaft so as to enter from the exfoliation suction port into the case.

9. The stencil printing machine according to Claim

6:

wherein said stencil printing machine is formed such that a total opening area of the transfer suction port is smaller than a total opening area of the exfoliation suction port.

10. The stencil printing machine according to Claim

6:

wherein the suction transfer means is provided with a guide rib for supporting the print sheet exfoliated from the side of the printing drum at the exfoliation suction port without bending the print sheet so as to guide the print sheet toward the

transfer belt.

11. The stencil printing machine according to Claim  
6:

wherein a plurality of the printing drums are provided  
5 via the suction transfer means.

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